Javascript is a cross-platform, interpreted, object-oriented, just-in-time compiled scripting language. It is used to make web pages interactive(for example if the user clicks a button then the theme of the website changes, or after scrolling the page a pop-up message may be displayed).It is used to make dynamic web pages.JavaScript has a standard library of objects, such as Array, Date, and Math, and a fundamental set of language elements such as operators, control structures, and statements. Javascript can be used for both client and server side programming.

**History of JavaScript:**

* In September 1995, Brendan Eich, a programmer at Netscape developed a programming language in just 10 days.
* This language was initially called Mocha, then LiveScript.
* In December 1995 Netscape and Sun(the organisation that owned Java) had a license agreement regarding Javascript(then LiveScript) hence it was renamed to Javascript and specifically "Java" script because Java was the most popular language at that time and this would help the marketing of Javascript as well.
* Javascript grew rapidly since then and in 1997 ECMA was given the responsibility to create a specification for the language (more on this in What is 'ECMAscript and how is javascript related to it?' section)
* Today Javascript is used by millions of developers and is used in major sites such as Google, Facebook, Twitter, etc.

**Takeaway:** Javascript was created by Brendan Eich in September 1995. It was initially called Mocha, then LiveScript, and finally Javascript.

**Features of JavaScript:**

* **Cross-platform:** Javascript is supported by many OS such as Windows, macOS, Linux, etc.
* **Object Oriented:** Javascript is an object oriented programming language, but it is not a class based OOP language like Java, C++, etc. It is a prototype based OOP language.

You might be familiar with class based OOP in Java or C++ where we write a class, objects are instantiated for it and when we want the inheritance to happen we create another class which inherits from the parent class specified, where as in prototyped based OOP there is no such concept of classes objects directly inherit from other objects this is possible because every object has another object called Prototype attached to it by default which acts as a template object from which the object can inherit properties and methods.

* **Scripting language:** Javascript is a scripting language it depends on the browser for the execution of scripts. It is mostly used as a client-side scripting language this means that it runs on the client's system (browser) and handles the webpages displayed to the user and the processing related to it such as cookies, sessions, local storage.
* **Dynamically typed:** Javascript is dynamically typed, it means type checks happen at run-time. In JS we don't have to explicitly declare what type of information will be stored in a variable in advance. For example when we declare var a, now a can have a string stored in or a number as well.
* **Loosely/weakly typed**: Loosely/weakly typed languages allows for implicit conversion of types. For example, in Javscript we can declare a var a and give it some value and if we use + operator with a string variable a will be treated as string and as a number if we do the operation with a number, var a is converted implicitly here.
* **Case sensitive:** Javascript is sensitive to the case of the letters.
* **Browser support:** Javascript is supported by all major web browsers example Chrome, Firefox, Safari, etc.
* **JIT compiled** is compiled by a JIT(Just in time) compiler which converts the JS code to byte code.
* **Interpreted:** Javascript is using an interpreter to convert the byte to machine code hence is it an interpreted language. light weight and interpreted language.
* **light-weight:** Light weight refers to a language which has fewer language constructs(any syntactically allowable part of a language such as if..else,functions etc), since JS fits this criteria it is a light weight programming language. (Note: It should be noted that with each new version released new constructs get added so JS is getting less light weight but it is still light weight compared to other programming languages like C++, Java etc)